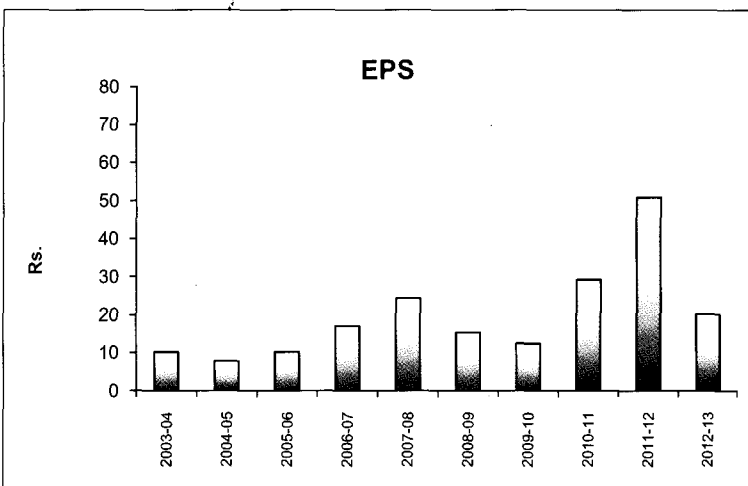
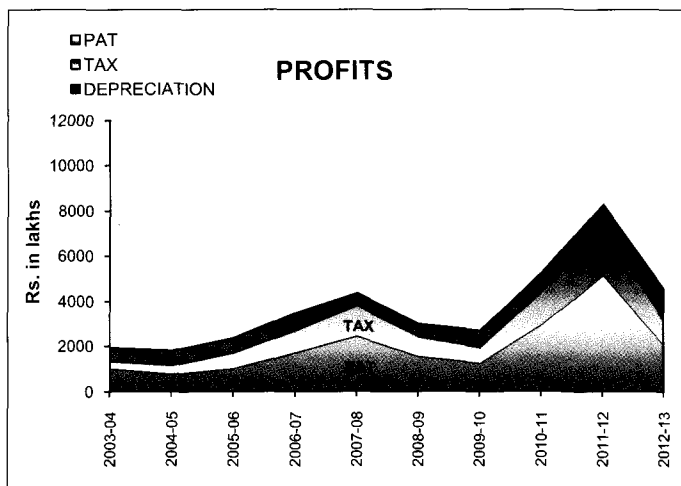
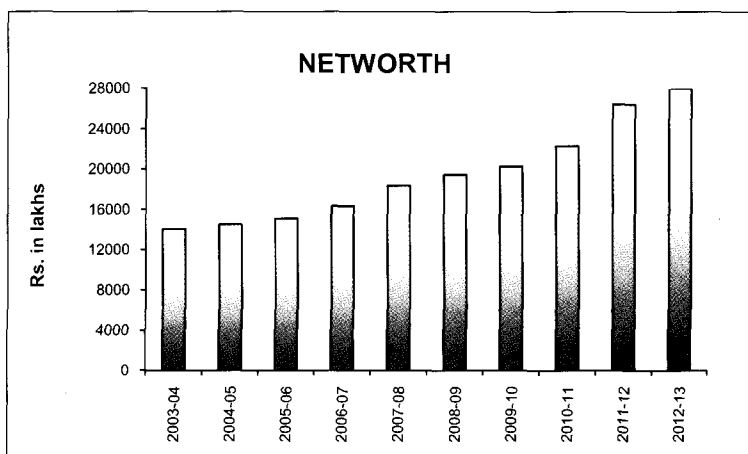
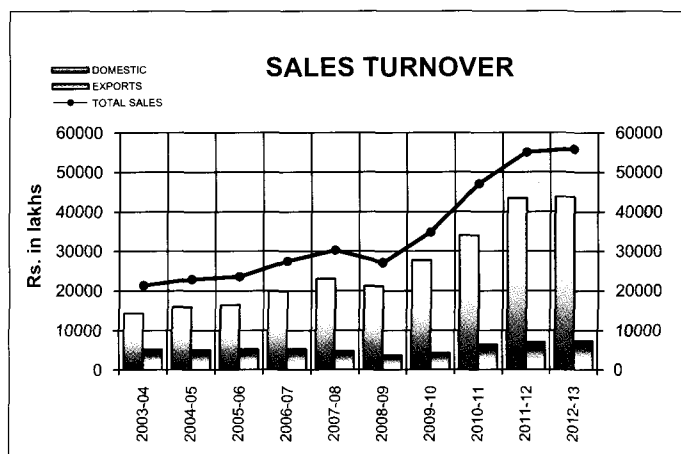




Power that touches lives!

Ten Years Financial Performance



YEAR	SALES TURNOVER (Rs. in Lakhs)			PROFIT (Rs. in Lakhs)					EPS (Rs.)	NETWORTH (Rs. in Lakhs)
	DOMESTIC	EXPORTS	TOTAL SALES	PBDT	DEPRECIATION	PBT	TAX	PAT		
2003-04	14360	5255	19615	1943	595	1348	317	1031	10.17	14087
2004-05	15969	5073	21042	1815	654	1161	363	798	7.87	14538
2005-06	16416	5238	21654	2372	655	1717	680	1037	10.23	15113
2006-07	19897	5329	25226	3489	787	2702	964	1738	17.13	16376
2007-08	23057	4725	27782	4364	537	3827	1354	2473	24.38	18351
2008-09	21159	3684	24843	3007	579	2428	864	1564	15.42	19441
2009-10	27719	4294	32013	2699	743	1956	687	1269	12.51	20235
2010-11	33823	6488	40311	5265	820	4445	1479	2966	29.24	22315
2011-12	43100	7033	50133	8304	1030	7274	2106	5168	50.95	26422
2012-13	43838	7399	51237	4501	1375	3126	1066	2060	20.31	28007

Corporate Information

Board of Directors

Mr. Siddharth Shriram
Chairman

Dr. D.V. Kapur

Mr. O.P. Khaitan

Mr. Ravi V. Gupta

Mr. T. Hamasaki
President & CEO

Mr. S. Yotsumoto
Whole Time Director

Mr. Y. Matsumoto

Mr. Vinay Mittal
Whole Time Director

Company Secretary
Ms. Payal Chaddha

Technical and Financial Collaborators

Honda Motor Co., Ltd.
1-1, 2 Chome, Minami-aoyama, Minato-ku
Tokyo, Japan

Statutory Auditors

M/s. B S R & Co.
Chartered Accountants
Building No. 10, 8th Floor, Tower-B,
DLF Cyber City, Phase-II, Gurgaon-122 002

Bankers

The Bank of Tokyo-Mitsubishi UFJ Ltd.
HDFC Bank Ltd.
ICICI Bank Ltd.

Registered Office

3&4/48, 2nd Floor, Enkay House,
Malcha Marg Shopping Complex,
Chanakyapuri, New Delhi-110 021

Head Office

Plot No.5, Sector-41 (Kasna)
Greater Noida Industrial Development Area,
Distt. Gautam Budh Nagar, UP- 201 306

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DIRECTORS' REPORT

Dear Members,

Your Directors are pleased to present the Twenty Eighth Annual Report together with Audited Accounts of the Company for the year ended 31st March 2013.

FINANCIAL RESULTS AND APPROPRIATIONS

Particulars	(Rs. in lacs)	
	Year Ended March 31, 2013	Year Ended March 31, 2012
Revenue from Operations	51,554.72	50,337.04
Other Income	697.49	1,108.06
Profit before depreciation and exceptional items	4,500.70	6,270.46
Depreciation	1,374.59	1,030.45
Exceptional items	-	2,033.82
Profit before tax	3,126.11	7,273.83
Provision for taxation		
- Current	735.81	1,969.55
- Deferred Tax	329.86	136.13
Profit after Tax	2,060.44	5,168.15
Balance of profit brought forward	13,293.08	9,705.90
Amount available for appropriation	15,353.52	14,874.05

APPROPRIATIONS

Dividend	405.72	912.88
Tax on Dividend	68.95	148.09
General Reserves	206.00	520.00
Balance carried to Balance Sheet	14,672.85	13,293.08

DIVIDEND

Your Directors recommend a dividend of Rs. 4/- per equity share of Rs. 10 each (40%) for the year ended 31st March 2013 (previous year 90%). The total outgo on this account (including dividend tax) will be Rs. 474.67 lacs.

APPROPRIATIONS

It is proposed to transfer Rs. 206.00 lacs to General Reserve and retain the balance in Profit and Loss Account.

DOMESTIC MARKETS AND EXPORTS

Your company achieved gross sales of Rs. 55,559 lacs in 2012-13 (as against Rs. 53,678 lacs in 2011-12) in domestic and export markets, thereby registering a growth of 3.5% over the previous year.

The year saw the introduction of the New 1kva generator which has received an encouraging response from the market. The technologically advanced EU series generators have shown robust growth.

During the year, your Company introduced a New Tiller cum Power Weeder model in the small 5.5 HP category for the domestic market.

A detailed report on operations titled 'Management Discussion and Analysis Report' is annexed to the Directors' Report as **Annexure - A** and forms part thereof.

INDIGENISATION PROGRAMME

Your Company is continuously working on cost reduction by localization of critical parts with the help of Honda Motor Co. Ltd., Japan.

To achieve cost competitiveness, the Company is focusing on reducing the import content in GX series of Engines through localization. All critical parts in

these models have been identified and accordingly planning for localization of these parts has been done.

The Company will continue to further evaluate the feasibility of localization of other Model parts for saving and cost competitiveness with support from Honda Motor Co. Ltd., Japan.

ENVIRONMENT PROTECTION & SAFETY

Your Company is committed towards the protection and safety of environment. All employees make efforts in daily operations towards controlling emissions, effluents and waste disposal arising out of manufacturing processes, product and services as per the predefined norms. Environmental improvements were achieved by completing the following actions:

- Installation of hot water based VAM (Vapour Absorption Machine) and commencement of recovery of waste heat from Engine jacket water through VAM for utilization in air conditioning of Office building. Commissioning of the same is for reducing the consumption of electric energy. However, since the system was commissioned in winter, the energy reduction could not be achieved during the current year. The benefits of reduction in energy are expected to be obtained from April 2013 onwards.
- Commencement of operation of variable speed type energy efficient Air Compressor from September 2012 onwards thereby reducing the electric energy consumption of compressors by 10%.
- Installation of LED (light emitting diode) Tubelights in new Assembly line.

Your Company is further planning to:

- Replace existing T5 tube lights with energy efficient LED tube lights.
- Replace the existing Metal Halide lamps with tube light fixtures
- Synchronize DG Sets for reduction in fuel consumption.
- Reduce Air consumption by replacing existing Air Guns used for component cleaning with energy efficient Air Guns operating at low air pressure and by installing solenoid valves in Air line of machines to shut off the air supply during machine idle time.

The products manufactured by your Company comply with the air emission and noise regulation norms notified by the Ministry of Environment and Forests (MOEF), Government of India. The 'Confirmation of Production' (COP) to the air emission and noise regulation is done as laid down by the MOEF.

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION, FOREIGN EXCHANGE EARNINGS AND OUTGO

The requisite information relating to Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo required to be disclosed pursuant to Section 217(1)(e) of the Companies Act, 1956 read with Companies [Disclosure of Particulars in the Report of Board of Directors] Rules, 1988 is set out in a separate statement annexed to this report as **Annexure - B** and forms part thereof.

DIRECTORS

Mr. H. Kanayama ceased to be Director of the Company with effect from the close of the working hours of March 31, 2013. Your Board places on record its deep appreciation for the services rendered by Mr. H. Kanayama during his tenure with the Company.

Mr. Y. Matsumoto was appointed as Director effective April 1, 2013. Your Board recommends the appointment of Mr. Y. Matsumoto as Director of the Company. Proposal for the appointment of Mr. Y. Matsumoto is being put up for your approval.

In accordance with the provisions of the Companies Act, 1956 and Articles of Association of the Company, Mr. Siddharth Shriram and Mr. Ravi V. Gupta, Directors of the Company retire by rotation at the forthcoming Annual

General Meeting ('AGM') and being eligible, offer themselves for re-appointment.

Brief resume of the above Directors, nature of their expertise in specific functional areas and the name of the Companies in which they hold the Directorship and the Chairmanship/Membership of the Committees of the Board, as stipulated under Clause 49 of the Listing Agreement of the Stock Exchanges, is given in the Notice convening the Annual General Meeting.

The remuneration of Mr. Vinay Mittal from 01.04.2013 to 31.03.2014 (both days inclusive) has been approved by the Board on May 20, 2013 subsequent to the recommendation of the Remuneration Committee at its Meeting held on May 20, 2013. Your Board recommends the approval of remuneration of Mr. Vinay Mittal. Proposal for the same is being put up for your approval.

Necessary resolutions for the appointment / re-appointment and remuneration of the aforesaid Directors have been included in the Notice convening the Annual General Meeting.

As per the confirmations received, none of the Directors of the Company are disqualified for being appointed as Director as specified in Section 274(1)(g) of the Companies Act, 1956.

AUDITORS

Statutory Auditors

The observations of Statutory Auditors in the report, read with the relevant Notes to Accounts are self explanatory and therefore, do not require further explanation.

M/s B S R & Co., Chartered Accountants, Statutory Auditors of the Company hold office until the conclusion of the forthcoming AGM and are recommended for re-appointment. The Company has received a certificate from them to the effect that their re-appointment, if made, would be within the prescribed limits specified under Section 224 (1B) of the Companies Act, 1956.

The Auditors have represented that they have been subjected to the 'Peer Review Process' of The Institute of Chartered Accountants of India and hold a valid Certificate.

Cost Auditors

As per the provisions of section 233B(1) of the Companies Act, 1956 and in accordance with the circular issued by the Ministry of Corporate Affairs, audit of the Company's Cost Accounts from the year ended March 31, 2013 has been made compulsory.

In pursuance to this, M/s Rakesh Singh & Co., Cost Accountants will be appointed as Cost Auditors of the Company for the financial year 2013-14 subject to approval of the Central Government and the cost audit report will be filed within the stipulated time period of one hundred and eighty days from the close of the financial year to which the report relates.

The Cost Auditors have certified that they are not disqualified under any of the provisions of section 224 (1B) read with Section 226 of the Companies Act, 1956 and that the appointment made is within the limits prescribed under Section 224 (1B) of the Companies Act, 1956. A declaration to this effect has been submitted by the Auditors to the Audit Committee. A certification from the Cost Auditors of their being an independent firm of Cost Accountants and at arm's length relationship with the Company has also been submitted to the Audit Committee.

DIRECTORS' RESPONSIBILITY STATEMENT

In terms of provisions of Section 217(2AA) of the Companies Act, 1956, your Directors confirm as under:

1. That in the preparation of the annual accounts, the applicable accounting standards have been followed alongwith proper explanation relating to material departures;
2. That the accounting policies selected and applied are consistent and the

judgements and estimates made are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit of the Company for that period;

3. That proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
4. That the annual accounts have been prepared on a going concern basis.

PARTICULARS OF EMPLOYEES

In terms of the provisions of Section 217(2A) of the Companies Act, 1956 read with Companies (Particulars of Employees) Rules, 1975, the particulars of employees are required to be furnished in statement to be annexed to this Report. However, as per the provisions of Section 219(1)(b)(iv) of the said Act, the report and accounts are being sent to all the Shareholders excluding the aforesaid Annexure. The complete Annual Report including this statement shall be made available for inspection by any shareholder during working hours for a period of 21 days before the date of the Annual General Meeting. Any member interested in obtaining the copy of the statement may write to the Company Secretary at the Registered Office of the Company.

CORPORATE GOVERNANCE

A separate section on Corporate Governance is annexed to this report as **Annexure - C**.

A certificate from a Practicing Company Secretary on compliance with the conditions of Corporate Governance as stipulated under clause 49 of the Listing Agreement with Stock Exchanges is annexed as **Annexure - F**.

CODE OF CONDUCT AND ETHICS

The Board of the Company has adopted a Code of Conduct and Ethics for the Directors and Senior Executives of the Company. The object of the Code is to conduct the Company's business ethically and with responsibility, integrity, fairness, transparency and honesty. The Code sets out a broad policy for one's conduct in dealing with the Company, fellow Directors and Employees and with the environment in which the Company operates. The Code is available on the Company's Corporate website (www.hondasielpower.com). A declaration signed by President & CEO of the Company with regard to the compliance with the Code by the Members of the Board and Senior Executives is annexed as **Annexure - D** and forms part hereof.

MANAGEMENT DISCUSSION & ANALYSIS

Management Discussion and Analysis Report is annexed as **Annexure - A**.

MATERIAL CHANGES AND COMMITMENTS AFFECTING THE FINANCIAL POSITION OF THE COMPANY AFTER 31ST MARCH 2013

There were no material changes and commitments affecting the financial position of the company after 31st March 2013.

ACKNOWLEDGEMENTS

Your Directors wish to thank and acknowledge with gratitude the co-operation, assistance and support received from the Central Government, State Governments of Uttar Pradesh and Puducherry, Company's Bankers, Shareholders, Dealers, Vendors, Indian and Japanese Promoters of the Company and other Business Associates in the Management of affairs of the Company.

The Directors also wish to place on record their sincere appreciation of the contribution made by every employee of the Company.

On behalf of the Board,

New Delhi
May 20, 2013

Siddharth Shriram
Chairman

MANAGEMENT DISCUSSION & ANALYSIS REPORT

DOMESTIC BUSINESS

GENSETS

- Your company launched a New 1 kVA Generator, EP1000, which is made in India, to fill the needs of home and small business owners, who have been demanding an affordable and fuel efficient alternate power source for long power cuts. EP1000 has been developed focusing on customers looking for a dependable power solution in the tier 2 and tier 3 cities. This new generator is power packed with the unique Honda decompression technology for effortless starting and has found good acceptance in the marketplace, the advantages of which have reflected in the overall sales volume.
- Despite difficult economic situation, the Company was able to maintain the overall sales volume while registering a robust growth of 25% in the Advance Technology based EU series generators.
- The dismal power situation in the southern states helped your company to realize incremental business from that region.
- The increase in the fuel prices during the year made customers explore better technology products to keep their running expenses under control. The 'Eco Throttle' feature in our EU generators has helped our customers to reduce the operating costs. Our communication of such features and benefits as a means of reducing costs has helped in reaching out to new customers.

Opportunities

- The New EP1000 generator with its affordable pricing is expected to expand sales in the semi-urban and rural areas. As the income levels amongst the Indian Middle Class are rising, their aspiration to lead a comfortable life is expected to sustain and improve the demand for this model.
- The Government of India is poised to expand and integrate many social initiatives. Many of these are related to IT, Computerization and Education. The success of these initiatives requires investment in power back up as well. Your company has been making efforts to reach out to such potential customers to help them carry on their businesses consistently and sustainably.

Concerns

- The comparative prices of petrol viz-a-viz kerosene, coupled with the limited availability of kerosene is likely to impact demand. We are striving to promote fuel efficient petrol generators to help reduce running costs for consumers.
- Inflationary pressures on the raw materials costs leading to overall increase in production costs are likely to result in increased prices of the products. This may also affect customer demand.

Outlook

- The power deficit due to increased consumption is expected to continue and the need for uninterrupted power will be a key driver to stimulate and boost generators business.

GENERAL PURPOSE ENGINES AND WATER PUMPING SETS

- The demand for Engines and Pumps fell marginally due to deficient rains in parts of the country.
- Your company continued its effort in increasing its network. This proximity to the users helped in reaching out to many prospective customers.
- Northern areas continued to support the business of engines needed for sprayer application. Such business again highlights the advantages of light weight and portable Honda Engines.

Opportunities

- Farm mechanization led by increasing farm incomes, Government

support and scarcity of labour is expected to increase demand for our Engines and their application for agri use.

- The new and fuel efficient petrol Water Pumps and Engines of your company are expected to increase demand in areas where kerosene availability is limited.
- Government support schemes and subsidies continue to help us leverage our presence in these segments.

Concerns

- Increasing prices of fuels and less availability of the same in rural areas is affecting sentiments and demand.
- Rising raw material prices are likely to result in an increase in prices, affecting demand.

Outlook

- Farmers continue to get support from the retail market through better prices of farm products as well as from the Government in the form of subsidies in input material. The demand based on the above parameters is expected to grow.
- The construction and OEM (Original Equipment Manufacturer) market is also developing considering the better cost structure in India. Your company is looking at increasing its presence in these segments by working closely with small companies and manufacturers. Our overhead valve engines series is expected to boost this business in the years to come.
- Applications such as sprayers and back pack sprayers are gaining popularity and your Company is working very closely with select good quality assemblers to grow volumes and counter the low cost Chinese made imported products.

BRUSH CUTTERS

- Honda Brush Cutters have been able to provide an affordable and efficient mechanized solution to replace the manual operations for farm activity like de-weeding and harvesting.
- Increased support from the Government in areas such as plantations and horticulture are providing the impetus to grow this business.
- The Southern markets continue to be the major areas contributing to sales.
- Your Company strengthened its after sales support activity and also introduced a new variant that is expected to consolidate and reinforce its leadership position.

TILLERS

- The category is showing promising growth as new areas are developing to help sales expansion.
- A new Tiller model with features better suited to the customers' requirement was launched. The demand for this model for initial land preparation and de-weeding is steadily growing amongst progressive farmers.

MARINE SEGMENT

- To leverage the growth in tourism and development of water ways, the Company has launched Out Board Engines and LTOBs (Long Tail Out Board Engines) to cater to Marine Segment. Even though the beginning is small we do expect an encouraging response from this segment.

EXPORTS

- During the last quarter, your company launched two new Models in the 1 kVA category. Initial response has been encouraging.
- Total sales during the year were 80% of the previous year's performance. The decline was from the price competitive engine

category while generator and water pump business registered a growth. Sales of the better realization generator category were the highest ever.

- The Middle East region continued to generate maximum business for your Company.
- With the dismantling of trade controls, your Company introduced its generators in Pakistan.

Concerns

- Rising material cost and fluctuation of Indian Rupee against the US dollar may impact the margins of the Export business.
- The competitive market scenario limits the scope for price increments.

Outlook

- Supported by the launch of the new generator models, the company will persist with its strategy to explore new markets.

THREATS, RISKS AND CONCERNS

The Company has adequate risk management systems in place. This is achieved by:

- Strict adherence to legal and Policy framework as required by Statute and Company Management. This is further ensured by way of regular updates at regular intervals and is further reconfirmed by status reports prepared by all departments of the organization for onward submission of consolidated status of compliances to the Board every quarter.
- Timely recording of all assets of the company in the books of accounts, physical verification process, adequate insurance coverage for all probable losses and for all concerned parties.
- Adherence to IT Security Policy designed by the Company with a view to avoid pilferage of sensitive data of the Company.

INTERNAL CONTROLS AND SYSTEMS

Your Company maintains an adequate and effective internal control system keeping in view its size and complexity. Properly well designed and documented policies, rules and circulars have been put in place, to ensure effective Management. These policies and rules are being further communicated to the lowest level of organization by way of formal and informal communication systems. The Internal Control System also ensures that financial statements are prepared in conformity with established accounting principles and practices. The assets of your Company are adequately safe-guarded against significant misuse or loss. An independent internal audit function is an important element of your Company's Internal Control System. The Internal Control Systems are supplemented through an extensive internal audit program duly approved by the Audit Committee. This is further subject to a periodic review by the Management and Audit Committee in its Meeting attended by Statutory as well as Internal Auditors of the Company. To further appraise the internal control function, your Company has appointed well established firms to conduct internal audit / control verification for the Company under the direct supervision and control of Audit Committee.

Additionally, a sort of whistle blower mechanism, Business Ethics Proposal Line (BEPL) system has been implemented in the Company, which ensures reporting by any associate, dealer or vendor of the Company of any act being considered as not in line with Policy, Rules or Code of Conduct of the Company or if not found to be in line with prudent commercial practice, to the appropriate levels as detailed in the system document itself.

FINANCIAL PERFORMANCE

During the year 2012-13 the net sale was Rs. 512.37 Cr. as against Rs. 501.33 Cr. in the previous year. This represents an increase of 2.20% in terms of value over previous year.

Profit Before Tax and Exceptional Items for the year was Rs. 31.26 Cr. as against Rs. 52.40 Cr. in 2011-12.

HUMAN RESOURCES

During the year, Human Resource (HR) launched key initiatives in disseminating your Company's focus in retaining the market leadership position by innovating and customising its HR strategy to meet changing business and employee needs.

In view of the current business requirement and to achieve self reliance, a lot of attention was directed towards employee skill development, development of leadership capabilities and strengthening of Risk Management. Your Company continues to invest in its people to upgrade their technical domain by providing on job training.

To enhance communication and transparency within the organization, a dedicated intranet employee portal was launched to access information relating to Company philosophy, HR Policies and other official communications.

In order to listen and assess the satisfaction level of line associates, an independent employee satisfaction survey was conducted during the year, the survey findings of which were very encouraging and reflected that line associates remain proud to belong to the Company and that they had confidence in its Management team. Actions are being planned for necessary required process improvement and benefits to attain higher satisfaction level. Communication between Management and line associates continued at the Shop Floor level to build positive work environment.

Another way in which your Company makes its associates proud of belonging to the Company is by showing its commitment in promoting diversity with regard to gender equality, your company has recruited and trained women line associates at Shop Floor roles.

During the year the 4th All India Convention of the New Honda Circle was organized by your Company where participants from other Honda Genpos and Vendors shared and recognized outstanding quality circles. The event was a grand success and provided a good opportunity for associates to learn from each other.

Various employee engagement initiatives such as sports activities, long service awards, poster campaign and slogan competition were held during the year. Employees showed lot of enthusiasm and team spirit and appreciated such initiatives.

Your Company realises that education and health care play a key role in the development of society. With the help of a Non Government Organization camps were organised and as a part of corporate social responsibility initiative of the Company, free books, stationary, school bags and medicines were distributed to the underprivileged in the nearby areas of the factory at Greater Noida.

The Company, as on 31st March 2013, had 1023 associates.

CAUTIONARY STATEMENT

Statements in this Management Discussion and Analysis Report describing the Company's objectives, projections, estimates and expectations may be 'forward looking statements' within the meaning of applicable laws and regulations. Actual results might differ substantially or materially from those expressed or implied. Important developments that could effect the Company's operations include significant changes in political and economic environment in India and key markets abroad, tax laws, litigation, labour relations and interest costs.

ANNEXURE - B TO DIRECTORS' REPORT**DISCLOSURE UNDER SECTION 217(1)(e) OF THE COMPANIES ACT, 1956 READ WITH COMPANIES (DISCLOSURE OF PARTICULARS IN THE REPORT OF BOARD OF DIRECTORS) RULES, 1988****A. CONSERVATION OF ENERGY**

Your Company strives to make the plants energy efficient to the extent possible and continually reviews various areas to conserve energy.

(a) Energy conservation measures taken:

The Company is committed towards the protection of the environment and safety. All the employees make efforts in daily operation in controlling emissions, effluents, waste disposal arising out of manufacturing processes, product and services as per the predefined norms.

Environmental improvements were achieved by completing following actions:

- Commissioning of waste heat recovery based VAM (Vapour Absorption Machine) for air conditioning of old and new Office Building by utilizing the waste heat of Engine jacket water through hot water VAM, leading to reduction of emission of CO₂ and reduction in emission of ozone depleting type refrigerant gases, released during maintenance of refrigerant type of old Air Conditioning units installed in the Building.
- Replacement of conventional fixed speed type energy inefficient Air Compressors by energy efficient variable speed type Air Compressors which reduced electricity consumption & CO₂ emissions.
- The products manufactured by your Company comply with the air emission and noise regulation norms notified by the Ministry of Environment and Forests (MOEF), Government of India. The 'Confirmation of Production' (COP) to the air emission and noise regulation is done as laid down by the MOEF.

Following energy conservation measure were taken to reduce the energy consumption by:

- Commencement of waste heat recovery of Engine jacket water through Hot water based VAM and using the waste heat for air conditioning of Office Building thus reducing the electric energy consumption. The energy reduction could not be achieved in current year as the system was commissioned in winter. The energy reduction benefits will be achieved from April 2013 onwards.
- Commencement of operation of variable speed type energy efficient Air Compressor thus reducing the electric energy consumption of compressors by 10% from September 2012 onwards.
- Installation of LED (light emitting diode) Tubelights in new Assembly line.
- Reduction in Natural Gas consumption in paint shop burners was achieved during the current year due to 12 months saving achieved in fuel by operation of waste heat recovery Boiler as compared to 7 months fuel saving in previous year.

(b) Additional investments and proposals, if any, being implemented for reduction of consumption of energy ;

Following actions are proposed to be taken for energy conservation in the year 2013-14:

- Replace existing T5 tube lights with energy efficient LED tube lights.
- Replace the existing Metal Halide lamps with tube light fixtures.
- Synchronize DG Sets for reduction in fuel consumption.
- Reduce Air consumption by replacing existing Air Guns used for component cleaning with energy efficient Air Guns operating at low air pressure and by installing solenoid valves in Air line of machines to shut off the air supply during machine idle time.

(c) Impact of the measures at (a) and (b) above for reduction of energy consumption and consequent impact on the cost of production of goods;

Above actions resulted in reduction in energy consumption. The thermal energy of fuel consumed in burners per unit production for the year 2012-13 is 16.44% lower than the immediate previous year due to utilization of waste heat of flue gases through waste heat recovery Boiler and other factors like product mix etc. 10% reduction in electric energy consumption of Air Compressor was achieved by commissioning of variable speed type Energy Efficient Compressors in August 2012 but the net electrical energy consumption per unit production is 5.9%, higher than the immediate previous year **due to various new model development trials and new Building expansion** which resulted into additional requirement of energy. The focus is continuing and is expected to be reduced in the year 2013-14 by about 2% over the year 2012-13 inspite of new production processes and machines planned to be added in 2013-14.

(d) Total energy consumption and energy consumption per unit of production

Particulars	Unit	Current Year 2012-13	Previous Year 2011-12
A. Power and Fuel Consumption			
1. Electricity			
(a) <u>Purchased</u>			
Quantity	kwh	11,39,308	18,07,850
Total Amount	Rs. (Lacs)	85.47	95.38
Rate / Unit	Rs./kwh	7.50	5.28
(b) <u>Own Generation</u>			
(i) Through Diesel Generator			
Quantity	kwh	1,81,391	6,90,128
HSD Qty	ltr	76,460	2,57,680
Unit per ltr of diesel oil	kwh/ltr	2.40	2.70
Cost / Unit	Rs./kwh	17.07	13.41
(ii) Through Gas Generator			
Quantity	kwh	40,22,646	28,56,778
LNG Qty	SCM	12,41,984	8,68,088
Unit per SCM of LNG	kwh/SCM	3.24	3.30
Cost / Unit	Rs./kwh	11.19	7.61
2. Coal			
Quantity (tonnes)		N.A.	N.A.
Total Amount		N.A.	N.A.
Average Rate		N.A.	N.A.
3. Furnace Oil			
(a) <u>Furnace HSD</u>			
Quantity (k.ltr)	k.ltr	N.A.	N.A.
Total Amount	Rs.	N.A.	N.A.
Average Rate	Rs./k.ltr	N.A.	N.A.
(b) <u>Furnace LPG</u>			
Quantity (kg)	kg	0	8,418
Total Amount	Rs.	0	4,65,015
Average Rate	Rs./kg	N.A.	55.24
(c) <u>Furnace Natural Gas (R-LNG)</u>			
Quantity (SCM)	SCM	3,55,664	4,41,355
Total Amount	Rs.	135,89,176	132,43,548
Average Rate	Rs./SCM	38.21	30.01
4. Others / internal generation			
Quantity		N.A.	N.A.
Total Cost		N.A.	N.A.
Rate / Unit		N.A.	N.A.
B. Consumption per unit of Production			
Production unit	No.	2,43,989	2,58,901
Electricity	kwh/Unit	21.90	20.68
Coal		N.A.	N.A.
Furnace oil		N.A.	N.A.
- HSD used in Burners of Furnace	ltr/Unit	N.A.	N.A.
- LPG used in Burners of Boiler / Furnace	kg/Unit	0	0.03
- Natural Gas (R-LNG) used in Burners of Furnace	SCM/Unit	1.46	1.70

B. TECHNOLOGY ABSORPTION

FORM - B

Disclosure of particulars with respect to Technology Absorption

Research and Development (R&D)

1. Specific areas in which R & D carried out by the Company

The Company has carried out work in the following areas:

- Technology to run Water Pump set on LPG fuel.
- Execution of indigenization of critical engine components through the process of data base generation.
- Substantial reduction in hazardous substances in product and processes.
- Development of following more efficient and technologically advanced Inverter Generator Models:
 - Recoil start - EU30i
 - Self start - E30is / EU65is
- Started development of GX160/200 (OHV Engines) for domestic market.
- Development of 1 kVA model for developing countries and domestic market.
- Development of new model for developed/advance countries.

2. Benefits derived as a result of the above R & D

- Clean Air Fuels such as LPG
- Environment friendly products / processes
- Cost competitiveness through localization
- Increase in foreign exchange earnings by meeting specific requirements of various countries

3. Future plans of action

Continue the process of data generation for indigenization of critical engine components.

4. Expenditure on R & D

a) Capital	:	Nil
b) Recurring	:	Nil
c) Total	:	Nil
d) Total R & D expenditure as a percentage of total turnover	:	N.A.

Technology absorption, adaptation and innovation

1. Efforts in brief, made towards technology absorption, adaptation and innovation.

The Company has availed the services of technical specialists from the foreign collaborator who impart on the job training and guidance to the Company's engineers and technicians.

For development of new technology model and to improve the manufacturing quality of Inplant / outplant parts, new manufacturing facility has been added in the following areas:

- Installation of new Paint Shop for liquid painting of Genset, Engine and Pump Parts.
- Replacement/ Reconditioning of old machine in the Crankshaft Line, Con Rod Line, Alternator and Weld Shop.
- Implementation of fuel efficient Furnace in Paint Shop and Pressure Die Casting.
- Implementation of low cost fuel i.e. piped natural gas in Furnaces of Paint Shop and Pressure Die Casting.
- Expansion of Dry off Oven in Paint Shop for painting of GX160/200 (OHV) Engine Fuel Tank.
- Expansion of Pressure Die Casting Shop to accommodate GX/1kVA new Model Pressure Die Casting parts.

- Expansion of Alternator Shop for production of Alternator for Inverter Generator Model.
- New addition of Global Assembly Line for assembly of Generator Model for advanced / developed Countries.

For giving guidance on specific matters related to indigenization, improvement of manufacturing method and quality, experts from Honda Motor Co., Ltd., Japan are frequently visiting the Company.

As a result of above efforts, the Company has been able to develop:

- Noise Absorption technology.
- Engine Technology for use of LPG.
- Development of new Genset Model of EU series.

2. Benefits derived as a result of the above efforts

The benefits derived relate to:

- Availability of super silent Gensets meeting the noise regulations.
- Clean air fuels in manufacturing processes.
- Better fuel efficiency.
- Elimination of hazardous fumes by introduction of new machine in Alternator Shop.
- Automation of manual operations.
- Increase in production capacity.

3. In case of imported technology (imported during the last 5 years reckoned from the beginning of the financial year), following information is furnished

a) Technology imported

Manufacture of Portable Gensets, General Purpose Engines and Water Pumping Sets. Technology to manufacture Pressure Die Casting parts of high quality.

b) Year of import

Technical Collaboration Agreement dated 18.10.1985 as renewed/ revamped from time to time and valid for a period of 5 years till March 31, 2017.

c) Has technology been fully absorbed?

No, this is in the process of being absorbed gradually.

d) If not fully absorbed, areas where this has not taken place, reasons thereof and further plan of action

The technology absorption of manufacture of I.C. Engine and Engine based products such as Gensets, Water Pumping Sets and Sprayers has started about 23 years back. Technology is further to be absorbed for high technology Engine components for indigenization and in producing the country specific products/ models for International markets.

C. FOREIGN EXCHANGE EARNINGS AND OUTGO

(a) Activities relating to exports; initiatives taken to increase exports; development of new export markets for products and services; and export plans :

1. Developed business from new markets in Pakistan.
2. Maximized sales from the high volume Saudi Arabian market.

(b) Total foreign exchange used and earned:

The foreign exchange outgo was Rs. 19,850.81 lacs on account of imports and payment of royalty etc. as against foreign exchange inflow of Rs. 7,144.13 lacs through exports.